This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~Burner with~~ A combustible gas burner comprising a burner head and inner and outer coaxial gas supply channels for the combustible gas and for a gas containing oxygen that are located in the burner head, the channel for oxygen containing gas having a cross sectional area of 0.8 to 1.8 times the cross sectional area of the channel for combustible gas, ~~characterized in that~~ and wherein the burner head, at least in the area of ~~the~~ coaxial exit ends of the coaxial gas supply channels, consists essentially of steel optionally alloyed with aluminum as a base, said base being coated with aluminum ~~of an aluminum containing material~~.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) ~~Burner~~ A burner according to Claim 1, wherein ~~in~~ at least one of the gas supply channels, ~~there is~~ comprises a vane therein that stabilizes ~~the~~ gas flow.

6. (Currently Amended) Burner according to claim 5, wherein the vane is set back relative to the exit ends of the coaxial gas supply channels.

7. (Currently Amended) ~~Burner~~ A burner according to Claim 5, wherein the incline of the vane is adjustable.

8. (Currently Amended) ~~Burner~~ A burner according to Claim 1, wherein ~~the gas~~ supply channels for the combustible gas and the gas containing oxygen ~~are made from gas supply tubes that~~ are inner and outer tubes arranged coaxially to one another.

9. (Currently Amended) ~~Burner~~ A burner according to Claim 1, ~~wherein there are~~ comprising means for producing a swirl flow in the gas supply channels.

10. (Currently Amended) ~~Burner~~ A burner according to claim 9, wherein the means for producing a swirl ~~have~~ comprise flow channels ~~that are~~ tilted tangentially against the direction of flow.

11. (Currently Amended) ~~Burner~~ A burner according to Claim 9, wherein the means for producing a swirl in the gas supply channels are adjustable in order to produce swirl flows of varied intensity.

12. (Currently Amended) ~~Burner~~ A burner according to Claim 1, wherein in the outside area, the burner has means for cooling by a vapor flow.

13. (Cancelled)

14. (Cancelled)

15. (New) A burner according to Claim 1, wherein the channel for oxygen-containing gas has a cross section 1.0 to 1.3 times the cross sectional area of the channel for the combustible gas.

16. (New) A burner according to Claim 8, having a ratio of cross sectional areas of the inner and outer tubes in the range of 1.0 to 1.3 respectively.

17. (New) A burner according to Claim 1, said outer channel having an exit end inclined toward the inner channel.

18. (New) A burner according to Claim 8, said outer channel having an exit end inclined toward the inner channel.

19. (New) A burner according to Claim 5, comprising means for producing a swirl flow in the gas supply channels.

20. (New) A burner according to Claim 6, comprising means for producing a swirl flow in the gas supply channels.

21. (New) A burner according to Claim 7, comprising means for producing a swirl flow in the gas supply channels.

22. (New) A burner according to Claim 21, wherein the means for producing a swirl comprise flow channels tilted tangentially against the direction of flow.

23. (New) A burner according to Claim 1, wherein the steel containing base is steel.

24. (New) A burner according to claim 22, wherein the steel containing base is steel.